

Abstract

The invention relates to compositions of a deacetylated poly N-acetylated glucosamine (dPNAG) of *Staphylococci*. The dPNAG may be isolated from natural sources or synthesized *de novo*. The invention also relates to the use of dPNAG as a vaccine for inducing active immunity to infections caused by *Staphylococcus aureus*, *S. epidermidis*, other related coagulase-negative or coagulase-positive *Staphylococci*, and other organisms carrying the *ica* (intracellular adhesion) locus. The invention further provides methods of use for antibodies directed to dPNAG, particularly for inducing passive immunity to the same class of infections.